



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,757	10/19/2001	Nghia Tran		4411

1473 7590 06/04/2003

FISH & NEAVE
1251 AVENUE OF THE AMERICAS
50TH FLOOR
NEW YORK, NY 10020-1105

EXAMINER

CHANG, DANIEL D

ART UNIT

PAPER NUMBER

2819

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,757

Applicant(s)

TRAN ET AL.

Examiner

Daniel D. Chang

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-75 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35-51 is/are allowed.
- 6) ☒ Claim(s) 52-75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

Acknowledgement

Receipt is acknowledged of the Response under 37 CFR 1.116 filed May 8, 2003.

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 74-75 are rejected under 35 U.S.C. 102(b) as being anticipated by Murdock (US 5,243,623).

Murdock discloses, in figure 2, a method of operating input/output device at a selected one of multiple logic standards, the method comprising: selecting a logic standard (a single-ended TTL or differential with MODE CONTROL; see col. 3, lines 22+); receiving an input signal at an input of the input/output device (20); and modifying the input signal based on the selected logic standard; wherein at least one of the multiple logic standards is a differential logic standard (col. 3, lines 22+), wherein the modifying further comprises modifying the input signal to comply with a logic standard selected from the group consisting of TTL (see col. 3, lines 22+), CMOS, open drain logic, GTL, terminated HSTL, and non-terminated HSTL.

The recitation that “programmable” has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a

Art Unit: 2819

structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 52-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murdock (US 5,243,623) in view of Pierce et al. (US 5,581,199).

Regarding claims 52, 54, 56-62, 64, and 66-73, Murdock discloses, in fig. 2, an input/output device (20) as capable of operating at multiple logic standards (see col. 3, lines 22+) comprising:

an input/output terminal (DO+/RI+, DO-/RI-);

an input buffer (24) having circuitry (DE/RE NOT, MODE CONTROL) to select between a first logic standard (TTL) and a second logic standard (non-TTL) wherein the second logic standard is a differential logic standard (differential; see col. 3, lines 22+);

an output buffer (22) having circuitry (DE/RE NOT, MODE CONTROL) to select between the first logic standard and the second logic standard;

wherein the input buffer and the output buffer are controlled by the same circuitry(DE/RE NOT, MODE CONTROL)

Art Unit: 2819

Murdock does not disclose that the circuitry (DE/RE NOT, MODE CONTROL) is a plurality of programmable elements.

However, Pierce et al. discloses memory cells (191, 194) to provide control signals to the buffer.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have provided the buffer circuits of Murdock with the memory cells as taught by Pierce et al. in order to control the input and output buffers.

Regarding claims 55 and 65, Pierce et al. discloses that plurality of programmable elements are elements selected from the group consisting of SRAM, EPROM, EEPROM, fuse and antifuse elements (col. 11, lines 10+).

Regarding claims 53 and 63, Murdock does not disclose that the differential logic standard is a standard from the group of HSTL and GTL.

However, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have substituted the output buffer circuits of Murdock with HSTL or GTL circuit in order to generate HSTL or GTL signals. It is an obvious matter of design choice.

Allowable Subject Matter

Claims 35-51 are allowed.

Response to Arguments

Applicant's arguments with respect to claims 52-75 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2819

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel D. Chang whose telephone number is (703) 306-4549.

The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Tokar can be reached on (703) 305-3493. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Daniel D. Chang
Primary Examiner
Art Unit 2819

DC
May 23, 2003

**DANIEL CHANG
PRIMARY EXAMINER**